

The Kankakee Grand Marsh

The northwest corner of Indiana was once covered by a vast, almost impenetrable marsh. Known as the Kankakee Grand Marsh, it was one of the largest wetlands in America. The marsh teemed with wildlife including frogs, beaver, fish, deer and turkeys. People from all over the world came to enjoy the sporting opportunities of this rich habitat. The Kankakee River ran from South Bend to the Illinois state line (a direct distance of 75 miles), meandered through 2,000 bends and travelled a total of 340 miles. The gentle gradient created this huge marsh around the river, that in places was several miles wide.

In the 1850s a project began to drain the wetland for agriculture and housing development. The length of the river was reduced to 85 miles. Over 500,000 acres of the marsh were lost, followed by the rapid decline in wetland species. Only a small remnant of this spectacular marsh remains today.

Disappearing Wetlands

Most of the 5.6 million acres of wetland found in Indiana 200 years ago no longer exists. Wetlands were viewed as unproductive areas, so farmers were encouraged to drain the land for agricultural use. This was done by digging a drainage ditch to the nearest creek, and/or burying a series of tiles in the ground to channel water to the ditches, and the creek. Often streams and rivers were straightened to increase water flow. Urban development, landfill sites and peat mining have also contributed to the loss of wetland habitat.

Attitudes are now changing and the vital roles of wetlands have been recognized. Wetlands are being reclaimed and changes in the law provide some protection for these disappearing habitats, but the demand for development still threatens the survival of wetlands.

Restoring W etlands in the Park

Most of Potato Creek State Park was once wetland habitat, part of the Kankakee Grand Marsh. In the late 1800's the land was drained and converted to agricultural use. Since the creation of the park many acres have been restored to wetland and further restoration projects are planned for the future.

An area that was once wetland can be identified by the distinctive soil, which is dark in color and rich in organic matter. Once the water has been rerouted to the area, by removing tiles and/or filling in drainage ditches, wetland plants quickly reestablish themselves. Planting seed is often unnecessary because a seed bank remains in the soil. With the right conditions, these seeds will germinate reestablishing the original wetland flora, even if the wetland has been absent for many years. This in turn attracts wetland creatures, increasing the biodiversity of the area.

The Benefits of W etlands

Wetlands are important because...

Wildlife rely on them for breeding, nesting, feeding and escaping from predators. Wetlands are home to over a third of America's endangered wildlife.

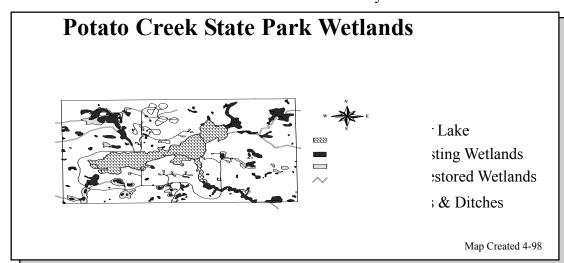
They **prevent flooding** by storing water like a sponge. The plant stems slow down the flow of water which collects in the wetland basin and soaks into the soil.

They **restore water quality** by removing toxic waste, excess nutrients and other pollutants from runoff. The bacteria and microbes living in the wetland break down this organic waste and absorb minerals. The excess nutrients are stored in roots and leaves, and are then released slowly back into the environment, often when nutrients are scarce.

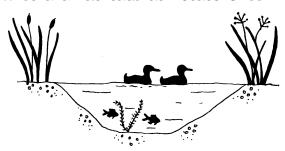
They **absorb greenhouse gases** such as carbon dioxide and release oxygen into the atmosphere.

They **buffer shorelines** against wind and wave action. The plant stems disperse energy from the wind and waves while the roots hold the soil in place.

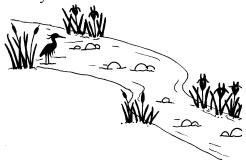
They are valuable for **recreation**. Walking, bird watching, water sports and photography are among popular past times. In addition they are an important **educational resource**.



W etland Habitats at Potato Creek



Lakes and Ponds are standing bodies of water. Lakes are usually larger and deeper than ponds. The water in both is often rich in algae, providing food for a host of aquatic animals. Larger aquatic plants occupy the shoreline. Worster Lake, at Potato Creek State Park, attracts large numbers of waterfowl and other birds, such as osprey and herons. Several of the ponds in the park were created by beaver dams.



Streams are habitats with a rapid flow of shallow water. Pools, of relatively slow-moving water, are separated by areas of shallow, turbulent water (called riffles). Algae and moss covering the stones in the riffles attract the majority of the stream's invertebrates which, in turn, attract predators such as fish and birds. Other aquatic plants grow in the slower moving water and along the stream banks.

Marshes are dominated by emergent aquatic plants such as cattails, bulrushes, sedges and reeds. Floating and submerged plants like duckweed and waterlilies are also present. Marshes support a huge variety of animal life, red-winged blackbirds and muskrats are common sights in this diverse habitat.



Swamps are dominated by trees and shrubs. Red maple is a common tree in Indiana swamps, along with shrubs like, dogwood, and spicebush. Other plants like skunk cabbage and marsh marigold grow in open areas. The trees and shrubs provide perfect nesting sites for a variety of birds including warblers and the beautiful wood duck.



Other wetlands in the park include, **fens** which support marsh like plants but with a large accumulation of peat and **sedge meadows** which often occur in field depressions and contain sedges and reeds.

Common Wetland Wildlife

Check off the wildlife you see while exploring the wetland habitats at Potato Creek State Park.

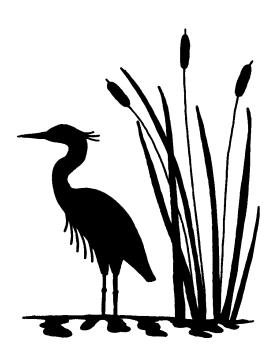
Mammals	
Beaver	Raccoon
Whitetail deer	Mink
Muskrat	Skunk
Birds	Daltad bin off abou
American coot	Belted kingfisher
Bufflehead	Canada goose
Great-blue heron	Mallard
_Osprey	Red-winged
Wood duck	blackbird
Turkey	Woodcock
Amphibians	
Bull frog	Eastern tiger
Green frog	salamander
Leopard frog	Red-backed
	salamander
Reptiles	
E. Garter snake	N. Water snake
Painted turtle	Snapping turtle
Fish	
Black crappie	Bluegill
Largemouth bass	Yellow bullhead
Invertebrates	
Backswimmer	Crayfish
Dragonfly	Water beetles

Damselfly

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Water strider

Wetlands at Potato Creek State Park



Interpretive Services Potato Creek State Park

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